

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 0099104-WS/mi	<b>FOR FURTHER ACTION</b>		See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/EP00/02117	International filing date (day/month/year) 10/03/2000	Priority date (day/month/year) 18/03/1999	
International Patent Classification (IPC) or national classification and IPC C12N15/12			
Applicant MERCK PATENT GMBH et al.			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I     Basis of the report
- II     Priority
- III     Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV     Lack of unity of invention
- V     Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI     Certain documents cited
- VII     Certain defects in the international application
- VIII     Certain observations on the international application

Date of submission of the demand 20/09/2000	Date of completion of this report 22.03.2001
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer  Roscoe, R  Telephone No. +49 89 2399 2554



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/EP00/02117

**I. Basis of the report**

1. This report has been drawn on the basis of (*substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17.)*):

**Description, pages:**

1-25 as originally filed

**Claims, No.:**

1-25 as originally filed

**Drawings, sheets:**

1/9-9/9 as originally filed

**Sequence listing part of the description, pages:**

26-29, as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

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EXAMINATION REPORT**

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- the description,      pages:  
 the claims,      Nos.:  
 the drawings,      sheets:
5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):  
*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*
6. Additional observations, if necessary:

**III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:
- the entire international application.
- claims Nos. 24, 25.
- because:
- the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):
- the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):
- the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
- no international search report has been established for the said claims Nos. 24, 25.
2. A meaningful international preliminary examination report cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:
- the written form has not been furnished or does not comply with the standard.
- the computer readable form has not been furnished or does not comply with the standard.

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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International application No. PCT/EP00/02117

**1. Statement**

Novelty (N)	Yes:	Claims 1-12, 14-23
	No:	Claims 13
Inventive step (IS)	Yes:	Claims 1-12, 14-23
	No:	Claims 13
Industrial applicability (IA)	Yes:	Claims 1-23
	No:	Claims

**2. Citations and explanations**

**see separate sheet**

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP00/02117

**I. Basis**

The documents mentioned in the present International Preliminary Examination Report are numbered as in the search report, i.e. D1 corresponds to the first document of the search report etc.

**III. No Opinion**

No opinion is expressed for claims 24 and 25 since these were not searched. It is further noted that claims to undefined modulators are not allowable anyway since known prior art compounds may have this function.

**V. Reasoned statement on Novelty, Inventive Step and Industrial Applicability**

- **Novelty (Art.33(2) PCT)**

Claim 13 - some of peptides that antibody is immunospecific for are defined in open-ended manner. Hence could comprise any known epitope. Antibodies would need to be defined as specifically binding a specific sequence to be allowable.

- **Inventive Step (Art.33(3) PCT)**

Applicant has isolated a novel inhibitor of platelet adhesion to collagen from leech saliva. A database search has not revealed any proteins with significant levels of sequence identity. Since the prior art did not even suggest the existence of this protein with the stated activity, inventive step can be acknowledged therefor and for uses thereof etc.

- **Industrial Applicability (Art.33(4) PCT)**

The present claims appear to have industrial applicability.

**VIII. Certain observations**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP00/02117

- **Clarity (Art.6 PCT)**

Applicant needs to put the sequence definition of e.g. claim 5 into claim 1.  
Definition of subject-matter by function and parameters is only rarely possible  
where no other reasonable options are available. This is not presently the case.

**Claim 3 - spelling**

Claim 5 should not be dependent on 4 since claim 4 is basically very narrow and  
claim 5 attempts to broaden the claimed subject-matter again.

# PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

## **NOTIFICATION OF ELECTION**

(PCT Rule 61.2)

Date of mailing (day/month/year) 31 October 2000 (31.10.00)	ETATS-UNIS D'AMERIQUE in its capacity as elected Office
International application No. PCT/EP00/02117	Applicant's or agent's file reference 0099104-WS/m
International filing date (day/month/year) 10 March 2000 (10.03.00)	Priority date (day/month/year) 18 March 1999 (18.03.99)
Applicant STRITTMATTER, Wolfgang et al	



made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<p><b>The International Bureau of WIPO</b>  <b>34, chemin des Colombettes</b>  <b>1211 Geneva 20, Switzerland</b></p> <p>Facsimile No.: (41-22) 740.14.35</p>	<p><b>Authorized officer</b></p> <p><b>C. Cupello</b></p> <p>Telephone No.: (41-22) 338.83.38</p>
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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 00/02117

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 C12N15/12 C07K14/435 C07K16/18 A61K38/17

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 C12N C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, STRAND, BIOSIS, CHEM ABS Data, EMBASE

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95 01375 A (HEMBERGER JUERGEN ;MERCK PATENT GMBH (DE); MELZER GUIDO (DE)) 12 January 1995 (1995-01-12) page 12, line 7 - line 9 figure 1 claim 1 -----	1
A	WO 92 07005 A (BIOPHARM LTD) 30 April 1992 (1992-04-30) abstract -----	1-23



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

• Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

25 July 2000

Date of mailing of the international search report

01/08/2000

Name and mailing address of the ISA  
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Authorized officer

Mata Vicente, T.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 24 and 25

Claims 24 and 25 refer to an agonist/antagonist of the polypeptide without giving a true technical characterization. Moreover, no such compounds are defined in the application. In consequence, the scope of said claims is ambiguous and vague, and their subject-matter is not sufficiently disclosed and supported (Art. 83 and 84 EPC). No search can be carried out for purely speculative claims whose wording is, in fact, a mere recitation of the results to be achieved.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Int'l Application No

PCT/EP 00/02117

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
WO 9501375	A 12-01-1995	AU 680929 B AU 7383694 A CA 2143416 A CN 1111058 A CZ 9500528 A EP 0662088 A HU 71399 A,B JP 8500848 T NO 950732 A PL 307726 A SK 27095 A US 5710131 A ZA 9404738 A		14-08-1997 24-01-1995 12-01-1995 01-11-1995 13-09-1995 12-07-1995 28-11-1995 30-01-1996 27-02-1995 12-06-1995 09-08-1995 20-01-1998 15-02-1995
WO 9207005	A 30-04-1992	AT 154034 T AU 659807 B AU 8666691 A CA 2093819 A DE 69126437 D DE 69126437 T DK 552269 T EP 0552269 A ES 2103831 T GR 3024437 T JP 6505703 T US 5587360 A		15-06-1997 01-06-1995 20-05-1992 11-04-1992 10-07-1997 04-12-1997 03-11-1997 28-07-1993 01-10-1997 28-11-1997 30-06-1994 24-12-1996